

<b>MANAGEMENT IN HEALTH CARE PRACTICE A Handbook for Teachers, Researchers and Health Professionals</b>	
<b>Title</b>	<b>ROLE OF HOSPITALS AT THE BEGINNING OF THE NEW MILLENNIUM</b>
<b>Module: 5.4</b>	<b>ECTS: 0.2</b>
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<b>Keywords</b>	Hospital, Public Health, Organization of Health Services
<b>Learning objectives</b>	After completing this module students and public health professionals should: <ul style="list-style-type: none"> <li>• be aware of the role of the hospital in the community;</li> <li>• be aware of the historical development of hospital services;</li> <li>• recognize needs for analysis of the hospital functions;</li> <li>• know listing the characteristics of different models of organization of hospital services;</li> <li>• improve the knowledge and understanding of the of function of the health care system.</li> </ul>
<b>Abstract</b>	During a long history, hospitals were continuously changing so that diversity is one of their characteristics. Being a part of a local culture, they also reflect general global trends. At present, the winds of globalisation are stronger, following an overall trend in technology and economics. Changes in technologies will induce changes in management (“new plants do not survive in old pots”). New imaging technologies need a better clinical feed-back, and the pattern of “industry-like” hospital, where specialists work in their narrow fields on a production-line becomes inappropriate for them. Human resource management becomes more important than economic and technical management dominating at present.
<b>Teaching methods</b>	Introductory lecture, exercises, individual work and small group discussions.
<b>Specific recommendations for teachers</b>	<ul style="list-style-type: none"> <li>• work under teacher supervision /individual students’ work proportion: 50%/50%;</li> <li>• facilities: a teaching room;</li> <li>• equipment: PC, internet link and LCD projection;</li> <li>• training materials: readings, hand – outs.</li> </ul>
<b>Assessment of students</b>	The final mark should be derived from the quality of individual work and assessment of the contribution to the group discussions.

# THE ROLE OF HOSPITALS AT THE BEGINNING OF THE NEW MILLENIUM

Želimir Jakšić

## THEORETICAL BACKGROUND

### Introduction

The future of hospitals and health services is a fashionable subject in the current discussions at the turn of the century (and the millennium!) (1-8). Nevertheless, it is a necessity because of different technical and economic pressures. Anyhow, it is a challenge because of the complexity and uncertainties in dealing with one of the oldest social institutions, deeply rooted in every culture. While forecasting, dreamers and entrepreneurs meet to express their desires and interests. History has to be called upon and future questioned, the facts reviewed. Different practitioners everywhere hope for new solutions. However, we know that most of predictions are regularly wrong even in the short run. In spite of that, the exercise is useful as a chance for critical consideration of complex facts. So, let us enjoy carefully, once again, our myths and expectations.

### Past experience

There is an old saying that those who do not know their past do not have a future. Hospitals had a glorious past (9). It may strengthen self-confidence and our myth that it has been one of the basic institutions of our civilisation. It will continue to fulfil certain essential needs of people being one of the strongest features of humanism, solidarity and charity, as well as of creative potentials in science and technology.

During a long history, hospitals were continuously changing so that diversity is one of their characteristics. Being a part of a local culture, they also reflect general global trends. At present, the winds of globalisation are stronger, following an overall trend in technology and economics.

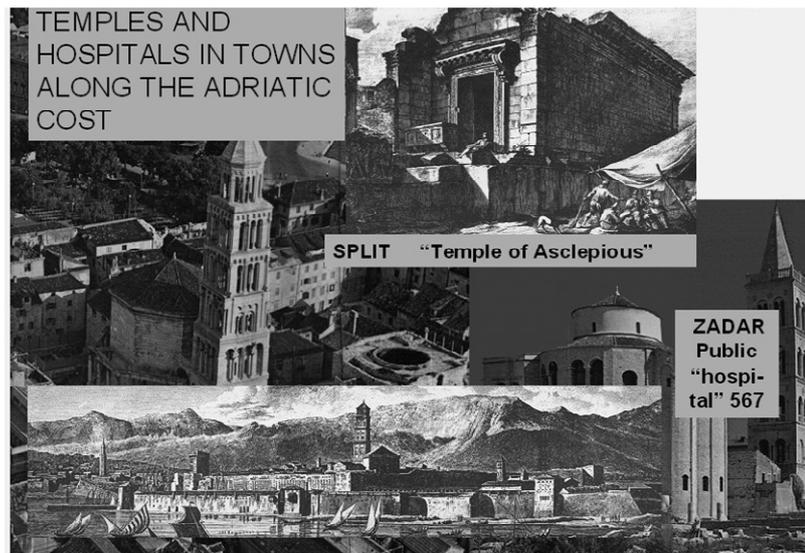
This is producing social tensions and problems. In extreme examples, some prestigious hospitals in many countries serve only the needs of powerful minorities and many expensive technologies are misused at the expense of relevant primary health interventions for a broader circle of poor people. Hospitals are here to stay, but appropriate “social diversity” has to be protected for the benefit of people and efficiency of resource utilisation.

### A review of different types of hospitals

Speaking about types of European hospitals, we should consider them in the broadest way, not only their shape and organisation, but also the main structural traits like mission and aims, or position of staff and patients. For our purpose we will choose some which have played a greater role in the history of Europe and which have influenced our thinking today.

When we start thinking about established institutions, we have to describe some of the famous ancestors of hospitals (10):

- The Aesclepieian temples in Ancient Greece (where in front of statues of “saint-mortal” Aesclepius, his daughters Hygieia and Panacea and other members of his families, priests and priestesses interpreted oracles and ordered treatment);
- Valetudinaria (originating from Latin word valetudo – health) and Thermae in Roman Times where soldiers and civilians were searching for health.

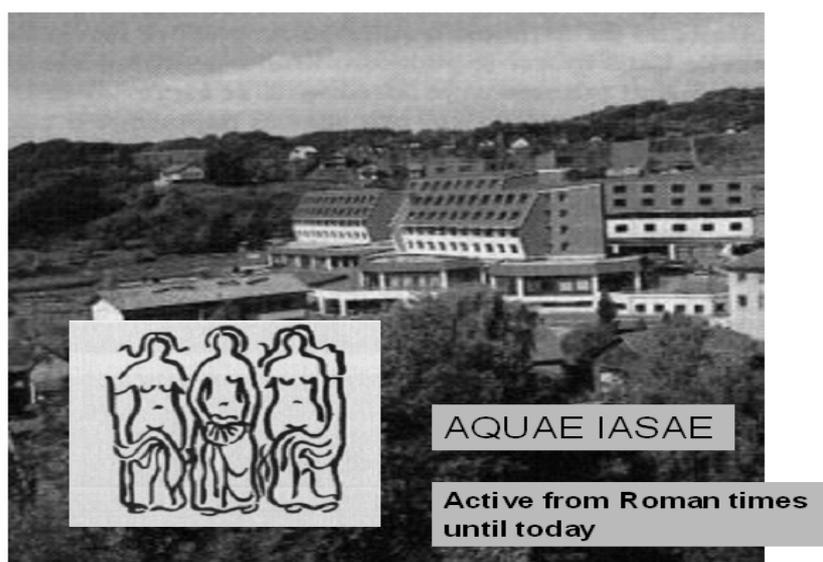


**Figure 1.** “Temple of Asclepius” in Split and hospitium in Zadar

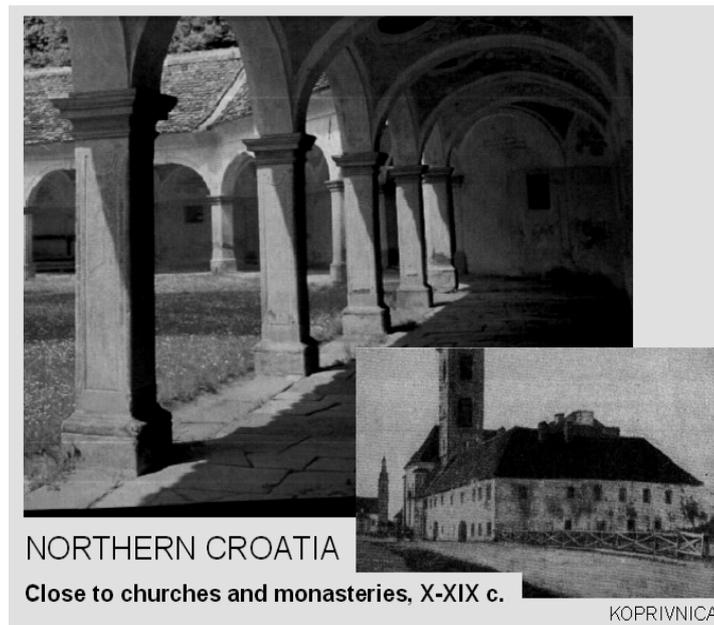
This early recorded examples were sacred places combining the powers of gods and nature for recovering from illnesses, but also strengthening health and capabilities of people. In the same places and with the same idea, we today have spas, rehabilitation centres, thalassotherapeutic, recreational and tourist centres, etc.

Following these old European roots, we come to immediate ancestors:

- Hospitia (original Latin meaning of places offering hospitality) were predecessors of a number of hospitals developed by Christian religious orders in monasteries widespread in the Middle Ages. Hospitia and these hospital served pilgrims, travellers, poor people and others, following the traditional hospitality and seven works of mercy.
- As in the previous times the main aim was to reduce suffering but even more important was to save souls. Very similar arrangements but at a smaller scale, as a shelter for very old and chronically handicapped or ill or very poor, were organised by priests and nuns in rural areas, close to parish churches, and sometimes by neighbourhoods for people without relatives. Some of these continue to serve until now.



**Figure 2.** “Aquae Iasae”, Varazdinske Toplice



**Figure 3.** Hospital close to church, northern Croatia

- A completely different mission had quarantines, lepper-houses, army creases, military lazarettes, and poorhouses organised by local and urban governments at about the same time. The aim was to protect the community and prevent the spread of epidemics.



**Figure 4.** The first quarantine, Dubrovnik

- Younger hospitals in urban areas were off-springs of hospitals related to monasteries and poorhouses, organised by public authorities to shelter ill people who could not afford it themselves. They were run by physicians and sisters, so that treatment and care were organised according to a new experience of medicine. On one hand, it were help to suffering patients, and on the other serving to protect the urban community to satisfy

feelings of justice, solidarity and charity. In the 17th century they started to be separate from asylums, and it was a real beginning of an institution which we now call a hospital.

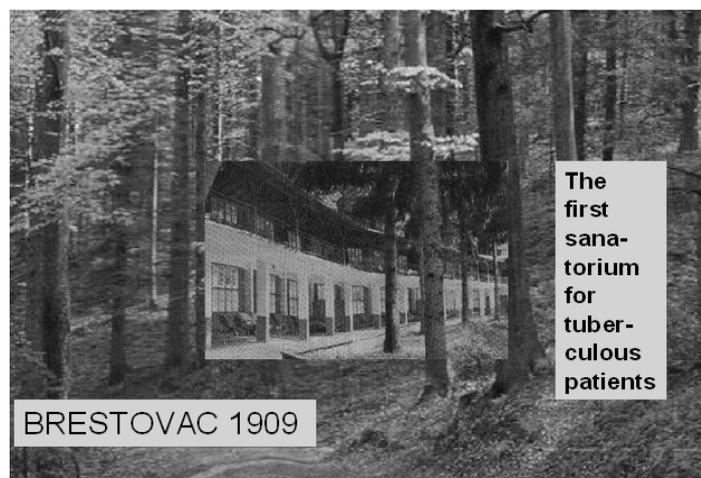
It is difficult to regard present hospitals as direct successors of all these institutions because medical science, technology and management changed thoroughly. In spite of that, some of the principle perceptive can be found in most types of the present hospitals: general hospitals, homes for the elderly and handicapped and similar socio-medical institutions, acute and long-term hospitals, modern hospiciums for palliative care etc. are all closely related by origin.

Modern technology, the birth of scientific medicine and development of complex diagnostic and treatment technologies influenced several types of institutions:

- Specialised hospitals, dispersed (cottage hospitals) and pavilion-type hospitals reflect also specialisation in medicine, different types of patients' needs and relevant technologies, difficulties in transportation in some areas, and better feelings of patients.

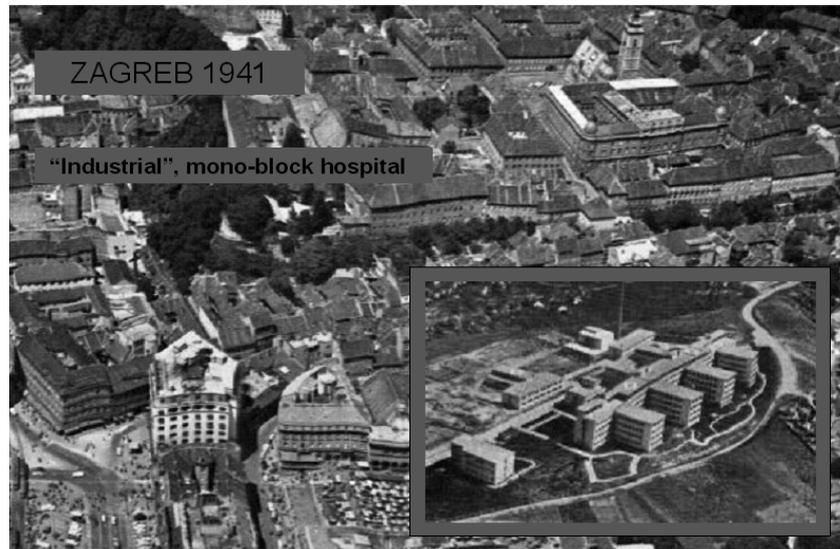


**Figure 5.** City hospitals, Zagreb



**Figure 6.** Sanatorium for tuberculous patients, Zagreb mountains

- “Industrial” or mono-block hospitals were the result of concerns for costs, best use of expensive technologies and experts. Mono-block hospitals are still most preferred. A typical industrial hospital is efficient but presses the staff to work on-lines in an industrial manner, contributing to developing narrow specialism.



**Figure 7.** “Industrial” mono-block hospital, Zagreb clinical hospital

Lately, for various reasons, such as a changed medical technology, a growing urbanisation, better means of communication, multi-morbidity etc. the division of hospitals to special and general hospitals has gradually changed to classification of hospitals to acute (short-stay) and chronic (long-stay) hospitals.

This is a possible reminder of hospital heritage. What may one conclude? Let us underline only general and lasting characteristics:

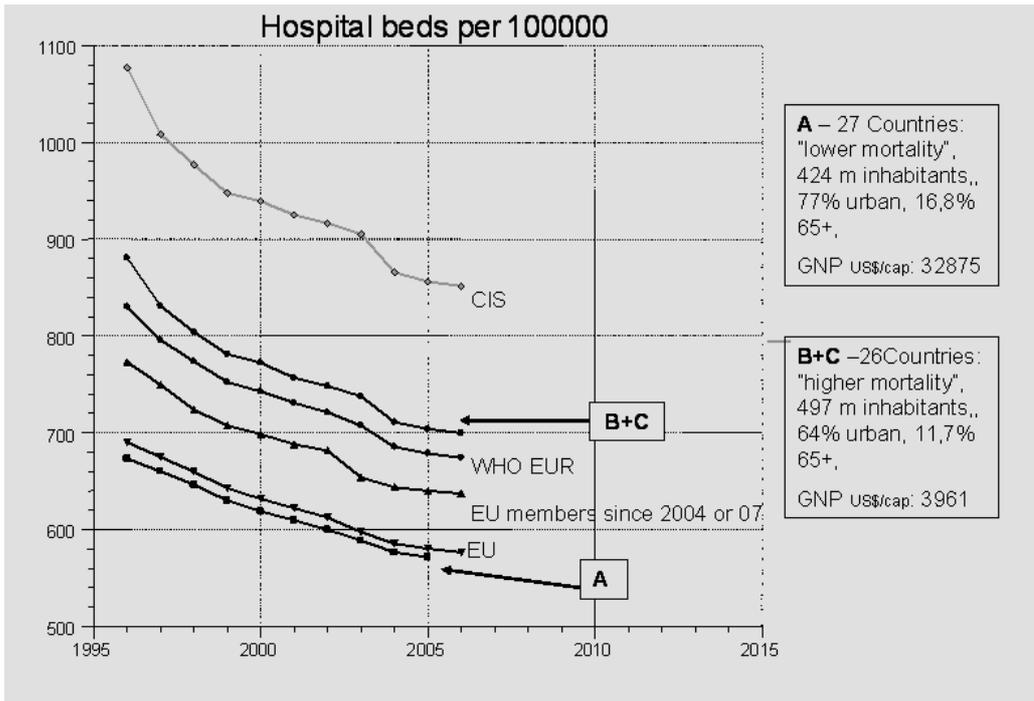
1. Importance, deep cultural influences and social embedding of hospital;
2. Distinct, closed and powerful structure, beyond the role as a unit of health services;
3. Diversity based on different mixtures of continuously same missions (caring for the needy, enhancing social security and quality of life of ill people, protecting community, and collecting experiences and teaching medical arts);
4. Capability of adapting to deep changes under the influence of external developments in spite of solid general structure.

### **Numerical data describing the present situation**

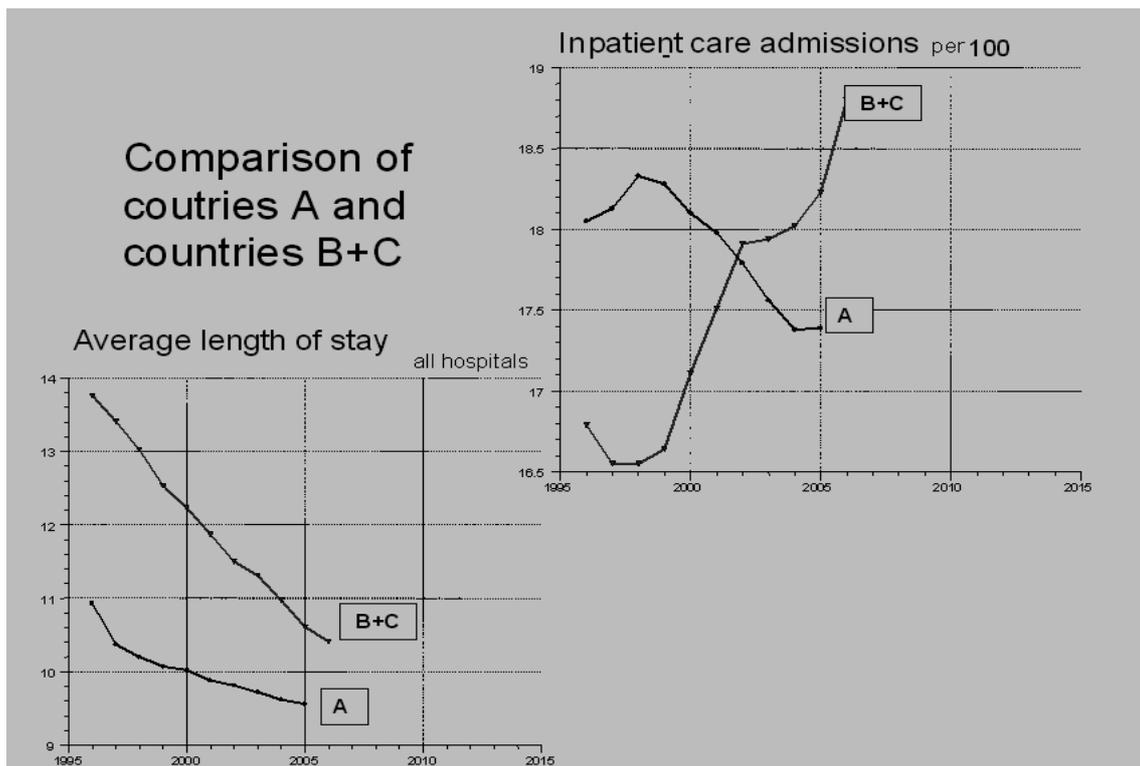
In Europe is working about 30 000 hospitals and they employ the largest part of health workers, representing 3% of the total workforce of Europe making one of the largest industries (11).

During the last decade in most European countries one can observe an increase of beds in long-stay hospitals, while in acute hospitals the number of beds is slowly falling, and in the same time the number of admissions is increasing. Figures 8 and 9 illustrate changes in the period 1980-1998 in Europe (12-14).

In spite of the recent reforms and containment policies around 50% of physicians and 40% of health expenditures are spent by hospitals. Figure 10 illustrates recent situation in Europe (12-14).

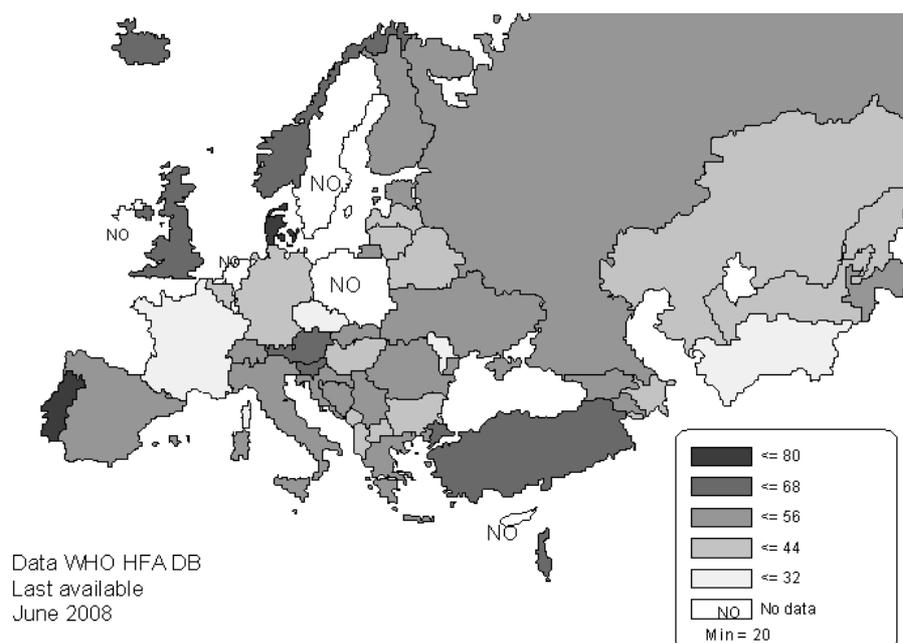


**Figure 8.** Number of hospital beds per 100 000 inhabitants



**Figure 9.** In-patient care admissions per 100 inhabitants

The differences among countries are evident and largely understandable, especially between the North and the South, and the East and the West (12-14). They are understandable because of the past developments and can be seen in most properties of care arrangements and delivery patterns.



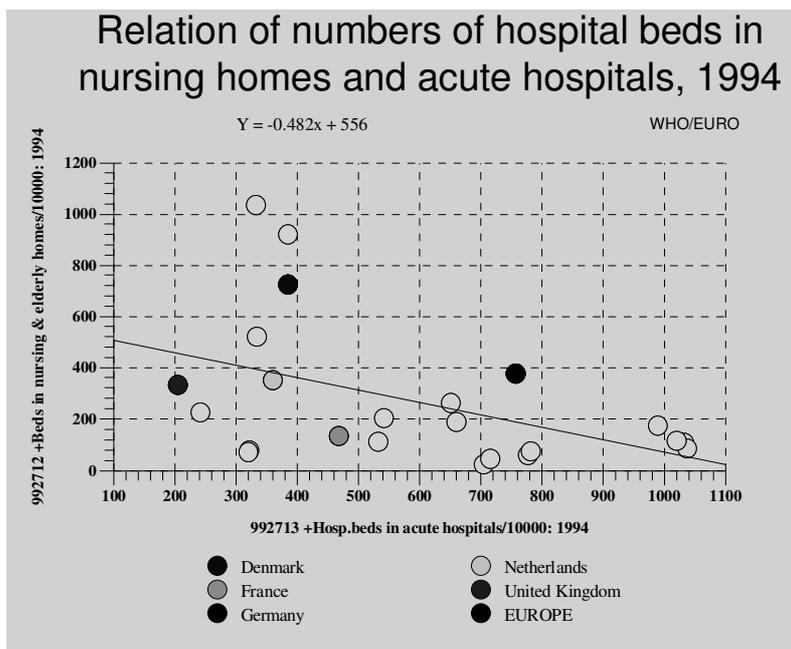
**Figure 10.** Percentage of physicians working in hospitals

As an illustration of striking differences in hospital data, interesting data are shown in figure 11.

Northern countries count higher numbers of long-stay hospital beds and Eastern countries short-stay hospital beds. Although negative correlation has been demonstrated between the number of the first and the other, the relation is not strong and may be explained by several extreme results and by the way how the beds are classified.

Many countries in Europe, except for Nordic countries, face the shortage of beds for low intensity long-term care. This shortage combined with growing needs, undeveloped conditions to support home care, unresolved tensions in financing and running a socio-medical institution between health and social care authorities has pressed general hospitals by necessity to mix together short and long-term care, and consequently work apparently inefficiently.

Last available data for 1995 in comparison with those of 1986 are shown in Table 1. Because of changes in administrative arrangements the comparisons during a longer period are difficult or even impossible. One can recognize differences between established market countries (EU) and CEE countries: rates describing admissions and length of stay in acute care hospitals are higher in CEE countries. There is, however, even a greater difference between Mediterranean and Nordic countries: higher rates of admissions and shorter length of stay. One has to interpret it carefully because weighted averages are calculated from data coming from different sources. In spite of that, one has to accept the fact that the differences exist not only between the European East and West, but even more between the North and the South (15).



**Figure 11.** Long- and short-stay hospital beds in Northern and Eastern European countries.

**Table 1.** Hospital admissions per 100 inhabitants and average length of stay in acute care hospitals 1986 and 1995 in selected groups of countries

Groups of countries	ADMISSIONS		LENGTH OF STAY	
	1986	1995	1986	1995
EU*	15,94	16,62	10,70	8,97
CEE*	17,03	18,36	12,06	9,89
NORDIC*	17,20	16,57	7,85	5,64
SOUTHERN**	12,74	13,61	10,30	8,32

Data by Health for All Data Base. European Region. WHO/EURO, January 2000.

\* Calculations are made for the EU AVERAGE (15 European Union countries), the CENTRAL AND EASTERN EUROPEAN AVERAGE (12 countries not including the ex-USSR countries), NORDIC AVERAGE (5 countries).

\*\* SOUTHERN countries include Croatia, Italy, Portugal, Slovenia and Spain.

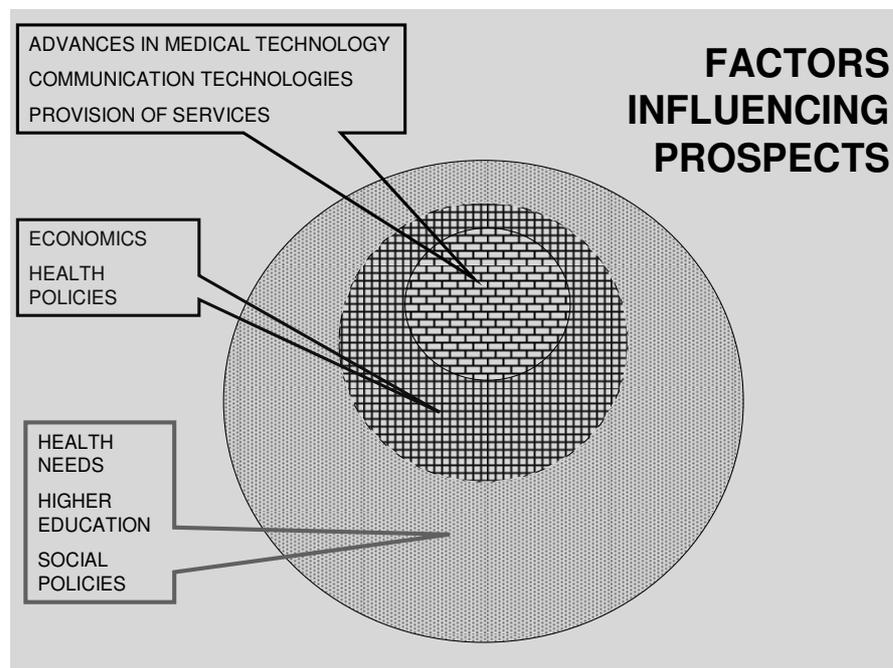
Calculations are done by ZJ.

In summary, there are considerable differences between countries and groups of countries in Europe, but there is also a general trend towards more admissions, shorter length of stay and a growing number of beds in long-stay hospitals. An important additional fact is that in most countries around half of physicians and 40% of expenditures are used by hospitals.

## Factors influencing the shape and type of hospitals

Hospitals have symbolically followed the path from a temple to a cathedral, and further on to an industrial enterprise and “recreational” centre, always following the leading historical trends and being close social powers.

However, hospitals of Europe live under rather different conditions predisposed not only to different health needs and economic conditions but influenced even more by traditional social and cultural factors. One important European issue was the role of the family and consequently religious, political and social way of life, including the use of social institutions, etc. (16). A number of factors were described in literature as influencing and gradually shaping the hospitals (Figure 12 and Table 2).



**Figure 12.** Factors influencing prospects of hospitals

The influences may be formally divided into factors affecting hospitals in different ways. As it is presented the inner circle has a direct and immediate effect, and factors in the outside circle have an important influence, which is visible only a longer period, possibly several decades. The intermediate group of factors is most visible and represents the main concern for managers. Most of factors usually start influence from outside, but they launch internal processes and may present themselves as being genuine.

The factors related to technological and managerial changes, spread fast and affecting many countries, usually starting from the richest and often frustrating the poorest. Most experts a priori regard them as progressive advancements, so they create a fashion and express themselves as obvious internal needs. Their impact is direct and mostly connected with essential technologies, medical and other, interfering with basic procedures.

**Table 2.** A tentative lists of factors influencing prospects of hospitals

<b>INTERMEDIATE CIRCLE</b>
<ul style="list-style-type: none"><li>• <b>Rising costs of medical procedures and interventions</b><ul style="list-style-type: none"><li>- social inequalities and poverty</li><li>- problems of privatisation and market mechanisms in health fields</li><li>- government, charity, economics and social policies</li></ul></li><li>• <b>Health policy</b><ul style="list-style-type: none"><li>- general and family practice</li><li>- home care</li><li>- doctors and patients' rights</li><li>- quality management</li></ul></li></ul>
<b>OUTER CIRCLE</b>
<ul style="list-style-type: none"><li>• <b>Social circumstances</b><ul style="list-style-type: none"><li>- diminishing family ties and breaking down of social networks</li><li>- age structure and trans-cultural migrations of populations</li><li>- mounting of violence and insecurity</li><li>- complex collaboration of charities, non-governmental organizations, free initiatives</li></ul></li><li>• <b>Changes in health needs</b><ul style="list-style-type: none"><li>- health problems of affluence (behavioural, obesity, ...)</li><li>- alarming numbers of impaired, handicapped and dependent people</li><li>- higher pressure towards prevention and rehabilitation</li><li>- returning problems of infections and ecological threats</li><li>- addictions and mental problems</li></ul></li><li>• <b>Higher level of education, information and expectations of people</b><ul style="list-style-type: none"><li>- active partnership and participation in medical decisions</li><li>- awareness of limits of medicine and utilisation of complementary services</li><li>- protection of personal rights and moral concerns in relation to experts</li><li>- increasing prevalence of "minor" psycho-socio-medical problems with severe consequences</li><li>- tightly packed mixture of scientific facts and advertisements</li></ul></li></ul>

The next group of factors often causes tensions and subjective responses because they are understood not as an objective necessity, but individual or group decisions and policies expressing their interests. In that way they operate as external and also as internal factors. They appear to be dynamic, but often looking for dynamics without change. Usually, their essential nature can be recognised and judged only after some time.

The outer circle of factors is producing slow changes, regularly not noticed or ignored as unimportant for some time. However, in the long run these factors are the most decisive ones. They are bound to local conditions and might have a variety of meanings in different countries, regions, or situations.

The majority of described factors start as external, but some is initiated from the inside of an institution by a successful scientific or managerial group or a purposely built R&D department.

Recently, the Total Quality Management (TQM) has demonstrated an ambition to stimulate such processes.

In considering the future changes of hospitals, one may systematically consider all factors, recognise those most influential and find strategies to utilise them.

In summary, we may state several, at the first glance, contradictory statements:

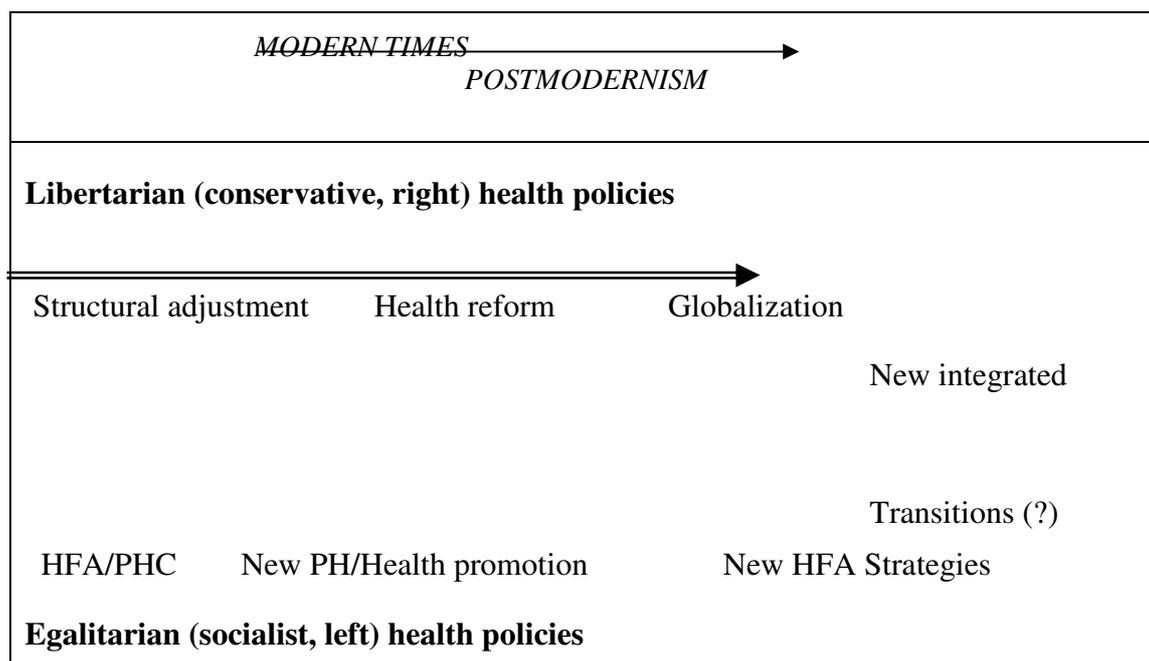
- Hospitals, as deeply rooted cultural institutions, will survive. All main types of hospitals (acute, long-stay, community and teaching) will continue to exist, but will probably follow different ways. This statement may be illustrated by monitoring of data about acute and long-term hospitals, as well as about the number of admissions.
- Nevertheless, the old “citadel cannot hold” (17). A wave of alterations in medical styles, becoming gradually more active in diagnostics and treatment, will influence the opening towards community. Besides, the fast change of medical technologies will ask for extremely flexible and permanent innovations. The shift of functions, substitution of techniques, and relocation of places is under way, as can be illustrated by a shorter average length of stay in hospitals, emerging of hospices, spread of day-hospitals, growth of hospital outreach services, etc. It is pending that some types of hospital should be reinvented or developed.
- In a society longing to become hospital-free and declaring against institutionalisation, one third of people might need traditional hospital help. Epidemic of old age, persistent poverty at the level of 20% of people, socially induced pathology (violence, stress, unemployment, insecurity), addicts, the infirm and handicapped, all produce a wide range of needs oriented towards social and health institutions, because social support and family resources are scarce. A great number of different types of institutions, working units, associations, self-help groups etc. increase the need for improved communication, and a greater effort for improved collaboration.

### **Waves of health reforms**

During the last decades there have been permanent waves of health reforms initiated by international organisations and powerful political and economic centres (18-20). During the seventies, Health for All policy (HFA) was globally spread together with all other “for All” (egalitarian) policies initiated by United Nations. It stressed the importance of community based primary health care, and was critical to the medical establishment. It gained support in governments of many, especially developing countries, but it faced resistance by groups of medical experts and some international organisations. It was implemented in some developing countries as selective (vertical) primary care. In most of developed countries it was transformed to a kind of primary medical care based on teams of general practitioners. The reorientation of hospitals was requested towards embedding it within the frames of health care as a support and consulting agency of primary health care. The reduction in the number of hospital beds was seen as important strategies to turn upside down the triangle representing the health system with hospitals on top and primary health care at the bottom, particularly regarding health expenditures. The most important point was equitable distribution of services. The impact of HFA policy was slow, but improvements were globally documented.

In the meantime, the economic and political situation changed from favouring egalitarian to libertarian manner. It was largely ideological and political, based on ideas of neoliberalism. The earthquake produced by the fall of the Berlin wall prompted a tsunami of health reforms not only in countries being previously behind the Iron curtain, but also in all other countries. It also divided international agencies: on one side World Health Organisation, and on the other side World Bank and other Bretton Woods institutions.

**Table 3.** Time-line of major health policies



Structural adjustment as a new economic and social policy produced the Health reform as a policy for health sector. Health reform was an attempt to raise health concern of people and stimulate medical productivity of health services by pushing health into the area of private interests and competitive state of affairs. Governments were under political and economic pressure from inside and from international agencies to reduce (“target”) social provision and introduce competitive and contractual conditions in public funds. Specifically in the health field, the arrangements were made to separate providers from purchasers and to foster competition among the providers. Health was largely regarded as a private good and health care as a commodity trade. The expectations were to reach better quality of services and higher productivity by spending less public resources. It was welcomed in many countries of Central and Eastern Europe as a sign of freedom, a chance for entrepreneurship and personal achievements, after years of shortages, suppression and imposed discipline.

Although in a number of countries hospitals were partly protected from radical changes, there were attempts in others to strengthen the competition among them as providers by different means, including their “privatisation”. These efforts were not always successful so that already in mid nineties the pendulum was swinging back. However, the tendency to reduce the number of acute hospital beds continued and their substitution by other types of services was promoted.

The described health reforms changed the previous picture of health services in many countries but also destroyed some of the traditional resources without empirical proof of advantages of market relations in comparison with Bismarck or Beveridge principles in the field of health care. Besides, many reforms were under influence of short-term expectations based on efficiency and narrowly conceived vertical health programmes as is usual in projects influenced by outside donors. A considerable part of liberated energy of health experts was lost in reorganisation and financial management instead being used to improve health care provision. The greatest cost of reforms was seen in the field of growing inequalities in health between the rich and the poor, and also in ethnic majorities versus ethnic minorities, between genders, and among different age groups. Deterioration

of health condition of deprived social groups was demonstrated in many developing and developed countries.

The political, monetary and trade powers supported irresistibly the spreading of libertarian ideas to all corners of social life. It started to be a global phenomenon during the last decade of the past century. It should have brought benefits through liberalisation of trade and fast exchange of information. Because it is targeted towards growth and productivity, the potential threats have been recognised in deterioration of ecological conditions, suppression of local cultures, and prescription of political solutions by big powers, because it appears that some people are more global than others. Direct health damages are possible in human trades (migrations, unemployment), spread of social diseases and violence, epidemics, power of transnational corporations with trade and not health interests in medical industries and similar.

In Table 4 possible perspectives of health systems in modern and post-modern times are tentatively presented (21). Selected trends in technical and managerial aspects of development are listed, mostly those in which changes one could witness every day.

**Table 4.** Perspectives of health systems development. Selected technical aspects important for hospitals' future

<b>INDUSTRIAL AGE HOSPITAL</b>	<b>HOSPITAL IN AGE OF INFORMED MARKETS</b>	<b>HOSPITAL &amp; RESPON-SIBLE GLOBALITY</b>
Public insurance/funds	Managed markets	Sustainable/fair funds
Providers' dominance	Consumers' importance	Partnership
Medical informatics	Tailored tele-medicine	Cyber medicine
Disease management	EBM and alternative care	Prevention/rehabilitation
Individual patients	Families and groups	New forms of unity
Stationary+ambulatory	Home and family care	Comprehensive care
Rationality	Quality (demand oriented)	Social accountability
Efficiency	Self care	Equity
<b>GROUPS OF SPECIALISTS</b>	<b>GENERAL/FAMILY PRACTITIONERS</b>	<b>INTEGRATED HEALTH TEAMS</b>

In Table 4 these characteristics are shown in parallel, indicating many inter-related and complex processes one can expect. After considering changes in such a way, it becomes clear that many and various results could be foreseen. Different developments are possible

in the future. Our individual activity in searching for the best solutions might become the most relevant issue.

One has to conclude that the issue of health in the recent changes of health policies remains unsettled. A search for a new balance between productivity and equity in health is persistent. Is a third sustainable way just another utopia or a valid possibility? Although it is a general political question, there is plenty of room for technical innovations, which will finally decide the way of hospital perspective and social practice.

### Two ways of thinking about the future mission

Missions declaring the outlook towards future are the result of different combinations of two major ways of value systems. These diverse approaches developed to satisfy different human needs and were presented already in the ancient myth about daughters of Asclepius, Panacea and Hygieia. In the life of stationary health institutions they were pictured in old hospicia and valetudinaria. They are evidently present also today in different health policies, and consequently in different types of hospitals (Table 5).

**Table 5. An ancient dichotomy**

<p><i>Panacea's highlights</i> (from ancient temples to acute and some long stay hospitals)</p>	<p><i>Hygiea's emphasis</i> (from valetudinaria to rehabilitation hospitals, sanatoria and some hospices)</p>
<p>passive patients' role resting and treating healing diagnosis technical relieving</p> <p>gods and science people's necessity authority individuals specialists power and excellency</p>	<p>active patients' role activating health promoting application human strengthening</p> <p>nature and experience people's utility support communion experts trust, acceptance and fairness</p>

Today, basic issues focus around two expressions: quality and equity (22, 23). We may describe them in terms of present-day "Sacred cows", the most au courant concepts, so often quoted in the form of acronyms (Table 6).

However, it is difficult to differentiate them clearly because the terms have changed their connotations. Quality and Equity are the best examples (24). Quality has changed from the traditional meaning of a technical excellence of services towards market oriented meaning of "satisfying people's perceived needs and demands". Equity has changed from the traditional concept of an essential part of human rights to equity in legal rights, fairness ("the art of possible") and partnership ("shared responsibility") (25-27).

Table 6. **Current opposite views in terms of “sacred cows”**

<b>QUALITY</b>	<b>EQUITY</b>
EBM - Evidence Based Medicine	PR – Patients’ Rights
TQM – Total quality management	H/FC – Home/Family Care
PEL – Professionalism, Ethics and Leadership	PHC – Primary Health Care
LO – Learning Organisations	PP – Patients’ Partnership
EE – Efficiency and Effectiveness	SS – Sustainability and Subsidiarity

So we have to conclude that in searching for the best definition of hospital missions there is a tendency of moving towards integration, an attempt at least to break through the traditional institutional walls, in spite of many real life difficulties.

### **Current policies and their criticism**

The missions are translated into policies. Among important policies, expected to solve problems and also open new lasting perspectives, we may identify the following:

- new health market reforms, informed patients’ participation - **The patient-centred hospital;**
- the change in contents, orientation towards health and quality of life - **The healthy hospital;**
- quality management, based on “learning organisations” - **The learning hospital;**
- conservative elitist approach: **Hospital as the centre of excellence;**
- close relations inside the health system, especially primary health care, supporting initiatives such as “hospital at home” - **The collaborative, “well embedded” hospital.**

There is a positive intention in each of the mentioned policies and in some of the examples of their implementation. A combination of them in different quantities may fit to needs and wishes of hospitals in different situations. At the same time they raise opponents and consequently difficulties and constraints.

### **Patient-centred hospital**

Patient-centred hospital in its full meaning should not be just a hospital where all services are organised around patients but where both the patients and the public are well informed about their work and performance and could participate in decisions on strategies for development (28,29). It obviously could help in communication, and “marketing”, but the decision making process should not be delayed or distorted. It also raises a far reaching question, how much of medical “secrets” one should “disclose” to the public? Nobody is apparently waiting for the answer, the process is already running. (See, for instance, web sites of National Committee for Quality Assurance, Health Care Report Cards, etc.). The time will tell us if it is going to be related to benefits and detriments of patients, medical experts and hospitals as institutions.

The pending questions about tactics remain:

1. Is it wise to change the tradition at the time of growing alternatives emerging in the market not even thinking about presenting the objective results of their work?
2. Are all parts of the health system willing to start the same and how could it be controlled?

## **Health Promoting Hospital**

The European Pilot Project supported by World Health Organization is now over then 10 years old (11,30). The Budapest Declaration of 1991 specified strategies and responsibilities of potential participants in an international network. It was followed by a formal Agreement (1993) and Vienna Recommendations. The core group of 20 hospitals evaluated and reported an impressive set of sub-projects. Subprojects were related to health of patients (patient satisfaction, nutrition, health education, rehabilitation, hygiene and safety), to health of staff, to health of community (promoting children health, prevention of accidents, control of alcoholism, young people information service, etc.), and to metaphorically conceived “healthy organization” of hospitals (effective communication with patients, decentralization, networking etc.). Largely, the projects are improving and complementing hospital services, building out-reach services, and better networking with others, aiming to involve or influence a broader group of European hospitals. Most of the participants at present are in the group of hospitals with 200-500 beds. Obviously, one has to consider new roles of different types of hospitals to avoid a change of terms only and to avoid mixing of roles with different other partners in the health system, particularly primary health care. The critical points consider a potential problem in building new hospital based outreach services using the existing resources in an expensive way.

### **Learning hospital**

The development of learning/teaching networks supported by modern technologies of interactive tele-communication seems unavoidable. Sooner or later most health institutions will be interconnected (“virtual integration”), without vertical integration, grounding great potential gains<sup>(31-33)</sup>. As a simple start one may describe a project called EuroTransMed. It involves a growing number of several hundred hospitals in Europe for lunch-time interactive lectures every Tuesday during the teaching semesters. These are coded satellite lectures and discussions in real time.

Several similar national networks exist in countries of Europe. Many world-wide possibilities are open through the Internet. The critical point is not how to get information but how to choose the right ones and organise their use. The flood of information may be counterproductive, thus increasing the danger of hidden control by sponsors and others looking for their individual interests and not for common benefit. It is not at all an easy task for users to judge the quality of information. The clearing and control of information, on the other side, may destroy all potential benefits. Some applications of tele-medicine might suppress the local expertise and experience instead of supporting it. Often it is easier to teach others than to learn ourselves.

### **Centres of excellence**

Centre of excellences are important as references for quality and as the only way to organise and protect one’s own values and rationality in the field of technology transfer under pressures of global economics. There are many unresolved questions (34,35). Should centres of excellence be nominated or let to develop? They could get more resources and a “trade name”, so that many would like to be considered for such a position. The essential factor for success is an able team of experts with a wide understanding of local health culture and policies, potentials and needs, and at the same time practicing scientific approach and rigour. Experts have to show outstandingly firm integrity. Such teams develop over years. Further structural questions are: Would it be better to concentrate teams in one place (centralised approach) or distribute and disperse them in several institutions? Are teaching hospitals by definition centres of excellence? There is not a pattern showing definitive advantages and the answers depend on local conditions (36). Therefore, this policy will be open to permanent local struggles and a political issue in most countries.

### **Collaborative hospital**

Collaborative hospital is the objective of a broadly supported policy. One can state that it is widely accepted, but rarely realised (6,37-39). The immediate problem of collaboration is that all those who should collaborate are counting on the same resources and because of that they do not trust

each other. The other problem is that often hospitals are bigger and stronger institutions and may dictate conditions for collaboration. One of the major difficulties is rather deep mutual misunderstanding with others because of multiple essential differences. One can demonstrate it by considering just a few basic differences between hospitals and primary health care units (Table 7).

**Table 7.** Some characteristics making difference between hospitals and primary health care units

CHARACTERISTICS	HOSPITALS	PHC UNITS
System's property	Closed	Open
Environment	Medical establishments	Community
Priorities	Diagnosis and treatment	Solving health problems
Focus of activities	Solving problems	Work with people
Feeling of safety	Higher	Lower
Way of thinking	Convergent	Divergent

There is no chance to overcome these deep systemic differences by nice words.

In summary, all described policies look acceptable and sound well. However, they have their shortcomings. It is understandable that many hospitals are cautious, as well as their partners in health field and in circle of policy decision-makers. How could somebody believe that the most powerful of all health institutions will start to change beyond what is necessary for marketing purposes and their own interests? The way to show a substantial interest is not to declare intentions in big words but to start changes and evaluate them step by step.

### **Should one consider new types of hospitals?**

The form and name of hospitals will change. We already observe spring ups, such as “hospital substitutes”, “hospitals without beds” (day care hospitals), “hospitals at home”, “virtual hospitals”, “tele-medical hospitals” etc. (40-43). There is a great interest for comparing and evaluating in-patient hospital care and home care (23, 44-50). One has to conclude that new types of hospitals are probable and one has to be prepared for changes. It might be important to consider new types built on foundations of the existing hospitals.

Deep changes have to be expected because of changes in technology. There are already experiences how to deal with them. After a certain time of adaptation, finally one has to build a new structure, which is new, in spite of carrying the old name. The other kind of change is under pressure of people's needs and demands. In this case new buildings might be constructed based on old concepts but often under a new attractive name. The new name shows a tendency to cover bad feelings and experiences with the traditional institutions, although the contents might be similar.

Under such circumstances the answer to the posed question whether reforms or (re)inventions would be needed should be – both is probable. For instance, reform of teaching hospitals might be needed, invention of health oriented contemporary valetudinaria (as it is described below) and reinventing of new community hospitals (as it is described later under the title of Case study).

### **The teaching hospital**

A traditional teaching hospital fulfilled tasks in research, training and the most complicated part of medical treatment (“tertiary health care level”). It was always complex and difficult, but now it has become almost impossibility. As a consequence, one may observe a movement in different directions.

In most teaching hospitals the research part became the biggest and started to dominate the other two functions. Among other reasons, not an unimportant one is to get resources from research funds, in many countries more copious than health and educational funds. Consequently the stay of

patients in teaching hospitals is shortened and applied technologies are sophisticated. Medical services are focused on diagnosis, most complicating treatment procedures and critical events. In that way, clinical training of undergraduates is narrowed to demonstrations using training environment suitable mostly for postgraduate training of specialists.

Teaching hospitals encompassing larger parts in different research fields and absorbing more experts became large institutions, or a system of interconnected institutions. In some examples, this caused them to play a role of a separate part and isolated them from the general health system. The problem of relative isolation led them away to research irrelevant for practice of health care for the time being, and oriented more towards international relations than problems at home.

A related problem is that teaching hospitals are linked to health sector in the government and to universities. To solve that in the few countries where teaching hospitals have not grown too big, teaching hospitals alone with all other capacities for education of health workers were put in the centre of the system in charge to manage regional health care. That was reported to be beneficial for relevant teaching, quality of regional health care, research oriented towards current local problems, but hindering capacity to follow advances in basic biomedical sciences and guarantee prompt and safe transfer of technologies.

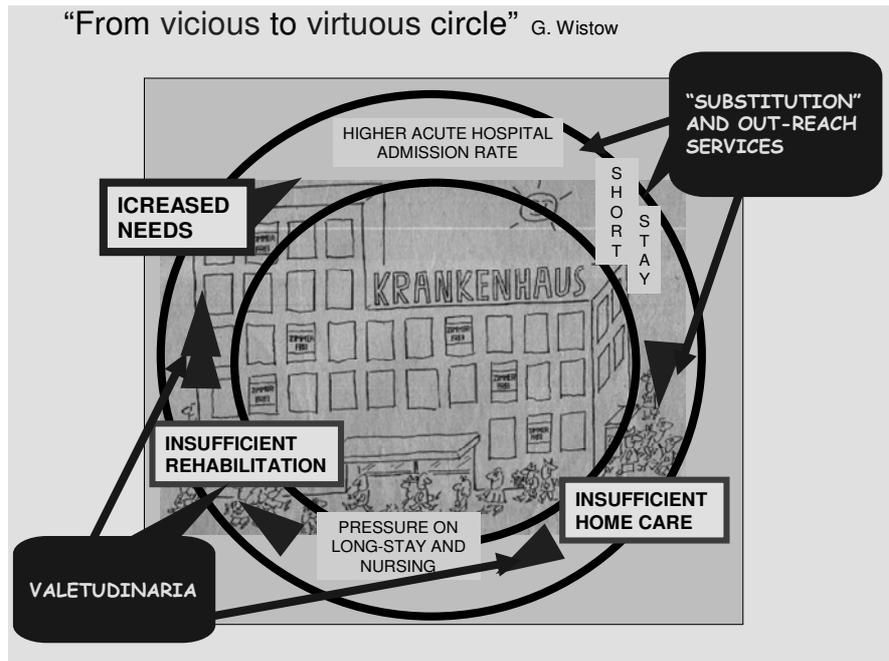
In other cases the system was purposely dispersed, and diverse hospitals and institutions took over parts of previous tasks of teaching hospitals in training or research. Co-ordination and rational use of resources became a problem and efficiency was questioned. In spite of that, for most countries a decentralised system is a necessity. The empirical evidence has not provided proof that large institutions are more efficient.

In the times of globalisation, it has become more important how the teaching hospitals will serve as a bridge between countries, while protection against hostile international market is growing. Therefore, the reform of the complex traditionally called teaching hospital is on top of priorities, even though the solutions are not obvious.

The *experience from Croatia* today demonstrates a situation of a small country with a recent war and poor economic situation and a system in transition to libertarian market conditions. Our teaching hospitals are largely decentralised, poorly co-ordinated and so far mostly swinging between tasks of tertiary care and education. Some important research institutions have been built separately. Our teaching hospitals have a certain regional influence but not a built-up responsibility neither for development of services nor for inter-regional and inter-national collaboration. The shortage of resources for all sectors covered by teaching hospitals (scientific research, health care and education) is at present hiding deficiencies and diverse interests inside institutions, diminishing the total production and generating inappropriate quality of work.

### **The new valetudinarium (a public rehabilitation and training centre)**

It is well known that the change in population structure of Europe and increased longevity produces greater need for care of the infirm, disabled and lonely persons as well as a growing concern for health, fitness and interest for active recreation. More people need help to warrant better quality of life, rehabilitate their physical, psychological and social functions, to prevent the deterioration of their conditions and to care about themselves. These demands are not new but we have recently been in the middle of an epidemic situation and reasonable forecasts tell us that after 2010-15 and later it has to be expected to become a normal endemic situation in all countries of Europe. A new understanding for these needs will certainly develop, because no feasible solution is possible following traditional or modern approaches. The *vicious* circle should be transformed into *virtuous* circle (51) (Figure 13).



**Figure 13.** From vicious to virtuous circle

The role of hospitals in turning the vicious to virtuous circle is multiple and important. It has to prevent the increasing admission rates by developing better relations with primary services and develop "substitute" and out-reach services (community hospital). The long-stay hospitals and nurseries need to intensify rehabilitation efforts and assure the continuation of rehabilitation at home and in the communities.

These core tasks in caring for the elderly, infirm and handicapped have always been distributed among families, neighbourhoods and special kinds of public institutions (like valetudinaria, spas and asylums), usually supported by voluntary and religious organisations. As the family role diminished dramatically, particularly in countries and in a period of unseen increase of material standard of life, the pressure for social intervention increased and produced a panic among governments and social services. The pressure is felt also in hospitals. Reaction to that is seen in three directions: a) development of hospices specialised for palliative care, b) various attempts to combine health care with recreational, tourist, climatic, rehabilitative enterprises, aiming predominantly to health protection and promotion, c) support to home care like "hospital at home", etc.

In all these developments there is a common denominator in the basic philosophy (assisting and enabling for better quality of life), and a similar set of techniques originating from rehabilitation of disabled persons. It is characterised by personal approach to mental and physical functions of each individual but also care for his work opportunities, home and social environment. To these are added clinical experiences in dealing with specific functional problems and introduction of proper behavioural attitudes towards preventive and promotive health activities. An outstanding role is seen in activating the handicapped themselves in all spheres of life, and particularly in appropriate physical activities, what is still restrained in contemporary medical practice. One could say that in the coming years the rehabilitation and prevention will become a relevant general medical approach and unavoidable for successful treatment and healing.

The question is how on the basis of the present institution one could envisage structure and functions of a new valetudinarium supporting home and primary care services in helping people to sustain their functional abilities and what is fashionably called "quality of life". It might be looked upon as a dominant and appreciated institution in the circle of the hospital family. Many technical and organisational questions are left to be answered and answers might be different according to

local cultures what should prevail: the Nordic activism, the Mediterranean takes it easy art of life, or the Central-European orderly regime? The main challenge would be co-ordination and support of resources existing in the families, neighbourhoods and communities as well as primary health and medical resources?

## **CASE STUDY**

### **An experience from Croatia**

As in many countries in Central Europe, there was a popular tradition in Croatia to treat people in spas, so that inns and traditional hospices, later hotels and hospitals, and finally rehabilitation centres were raised around them. Moreover, rehabilitation was organised in hospital departments of general and some special hospitals (e.g. traumatology), and at last also in special institutes connected with teaching hospitals. The popular treatment of rheumatic troubles of the elderly and other handicapped, of a growing number of injured in traffic accidents etc. was performed in hospitals or by outreach units of hospitals, while primary health care was largely left out and treated the major group of the same patients by pharmacological means. This was a double, expensive and disintegrated way of rehabilitation process gradually discouraged by limitation of insurance funds.

During the last war, because of many wounded and disabled persons, a project was launched with international help to start Community Based Rehabilitation<sup>(52)</sup>. It started in difficult times and developed as a separate project with evident advantages. However, misunderstandings and resistance were strong, based on traditional attitudes about medical rehabilitation as a hospital specialty and little interest of primary health centre to be involved. Many other needs and demands have been identified in local communities besides disabilities of war victims. It was also shown that community based rehabilitation was an effective and efficient component making the whole rehabilitation system less expensive and improving the final results. In spite of that, after the greatest post-war needs have been over, the project lost support. The question remained if Community Based Rehabilitation could survive competition, misunderstandings and all kinds of passive and active resistance. It might happen that a new type of open door institution has to face the same type of difficulties.

### **A new community-based personal hospital**

When we consider possible changes of hospitals expecting benefits for the entire health system, a community hospital may have the priority. It should become a centre for regional co-ordination of health services, a local focus for accumulation and transfer of knowledge and experiences. The idea is that smaller regional or sub-regional hospitals should be transformed into an institution functioning as a vital local support of primary health care and general/family practitioners, as well as social care and socio-medical institution for palliative care, community based rehabilitation units, etc. This might be a new community hospital (53).

The community hospital itself should be a combination of a traditional general hospital, a health promotion hospital and a learning hospital. Its characteristics might be described with the following attributes:

- short-term (neither ultra acute, one day hospital without beds, nor predominantly a long-term hospital);
- general (not specialized for any particular disease);
- middle sized (200-400 beds) (54);
- active in health promotion, prevention and rehabilitation;
- community oriented, transparent and visible to the community,
- performing and supporting some of out-reach, home-centred health care activities;
- flexible in organization and arrangements;

- keeping open door policy for local health experts;
- performing and supporting teaching and research as part of quality assurance.

The dynamics of changes in the described direction will differ, but probably speeding-up in the coming years. This is clearly a common and important element of a renewed system of hospitals.

We will describe now our experiences in some details.

### **A warning from the Croatian experience**

The history of hospitals in Croatia was similar to those in the Southern Europe, and later in the 18<sup>th</sup> century to the Middle Europe, namely the Habsburg Empire. The strongest impulse to organization of health care at the territory of the former Yugoslavia was the work of A. Štampar after the World War I. His socio-medical views were oriented towards ‘people’s health’. With great energy and skill he created a system of Institutes of Public Health and health centres. Active in the League of Nations and having been one of the founders of the World Health Organization, Štampar was known as a ‘bear of the Balkans’ because of his energy and, recently, as ‘the grandfather of primary care’ because of his principles (55). Hospitals were not his stronghold and he could understand them only as a supportive part of a comprehensive health system. In his time, hospitals were isolated as centres of medical and social power. To balance that power and private practitioners, his strategy was to develop health and equity oriented primary care.

On these foundations it was not by chance that later ‘Andrija Štampar’ School of Public Health started in Zagreb the first vocational training of general practitioners (‘specialization’ in general practice, Professor A. Vuletić). A network of health centres was spread throughout the country, consisting of services provided by GPs and by dispensaries for socially important maternal and child health, tuberculosis, and other public health activities. At the same time, ‘stationary capacities’ were built, as an expression of a tendency towards regional self-sufficiency. The tensions between hospitals and primary services, well known in many countries, were pronounced.

In those circumstances, integration of hospitals with other services was early recognized as a problem. In regional centres for a territory up to 200 000 inhabitants, the merge of general hospitals with all other outpatient, public health and primary care units into one organization, started in 1957 and was in full strength in 1970. The organization was called ‘Medical centre’ and 24-25 of them comprised practically all general hospitals in provincial towns, except 8 in four biggest towns of the Republic (56). Medical centres were meant to functionally interweave prevention and care, in- and out-patient services, even allowing interchange of physicians in and out of hospitals in the same disciplines or services. The marriage existed for more than 20 years with ups and downs, but rarely fully meeting their original objectives. Evaluation studies showed that the success shown in better efficiency was largely dependent on local managers who could envisage and insist on a mission of integrated health care. Without that additional leadership the organizations were lost in solving individual problems separately, further dividing interests with an additional problem of hidden transfer of resources to the stronger part, which was the stationary part in the hospital. Finally, just before the divorce, the flow of resources was legally stopped, so that only administrative frame remained from the original idea of integration.

This experience might be important in consideration of the future of hospitals as a warning not against the idea but about the difficulties in the implementation. Unfortunately, because of coincidence of many external economic and political factors influencing the described outcomes, the main reasons for failure have never been clearly identified.

## **Concluding summary**

1. Considering the future, we have to understand our limits. We may put together our best wishes but we will never reach the actual future surprise and shock. However, by formulating our expectations we contribute to the wide stream of development. The future is not only in adaptation to turbulence of history and solution of present problems, but in contribution by innovations, experiments and daring to change. The solution is in openness to new perspective while swimming in the main stream, and not in protecting the old citadel.
2. The hospital will continue to exist as an important part of a health system. Rather, it will develop in many diverse types of hospitals in the four main classes:
  - group of high-level institutes and hospitals enabled for scientific research and advanced teaching
  - “innovated” community/regional hospitals making the backbone of stationary services, built into the local network of health and social services, with special concern for acute and critical episodes of medical and personal needs of patients
  - long-term hospitals in many forms of combined health and social institution according to local traditions and cultures
  - group of institutions (“valetudinaria”) concentrating facilities oriented towards health promotion, relaxation and rehabilitation, attracting a wide range of people and placed in attractive natural resorts.
3. The hospitals share the destiny with other social institutions influenced by:
  - socio-economic factors such as ageing structure of populations, economic inequalities, immigrants, growth of tensions and violence, problems of affluence
  - fast medical and technological changes in surgery, genetic and molecular interventions and other altering deeply the present medical treatment
  - needs, expectations and attitudes of patients, customers and the public
  - shortages in appropriate staff for human personal care, inter-disciplinarity of staffing and other shifting in human health resources
4. In spite of strong influence of the globalization trends, there will continue diversity in attitudes and running-styles of hospitals in different parts of Europe in accordance with different social, cultural and religious traditions, social policies, role of states, position of families and local communities, etc. There will be unstable mixing of five historically developed pivots: Nordic and Mediterranean, East and West, with a discrete Middle, with possible addition of substantial newcomers outside Europe.
5. Relations and opening to surrounding community might be a promising strategy for most of hospitals (except some national teaching hospitals). In the long run, it might prove superior to closing, defending the gained position or relying predominantly on trans-national medical and pharmaceutical power structures. In sustaining lasting relations with communities win/win strategy should dominate, relying on proper initiatives, collaboration, stimulation and support, avoiding whenever possible the win/lose philosophy, based on replacement or suppression of other local resources and tendency to market domination.
6. It is time challenging leadership and management of hospitals. Open-minded flexibility and entrepreneurship has to be combined with wisdom and critical professionalism. The investment in development of experts and stimulating work conditions has to be balanced with comfort, privacy and satisfaction of personal needs and rights of patients. Support of inter- and trans-disciplinary teams and networking with other institutions are among the most difficult tasks, equal only to survival in flood of information and diversity of unexpected day-to-day running problems.

## EXERCISE

### Recipe for the future: Firm mission and flexible management

Let us for a moment to be a captain steering a big solid ship (such as hospitals are). Standing at its commanding deck, the captain is carefully watching the main, the map and the instruments. What will he find? He will easily spot many swimmers around, trying to climb the deck of the ship, but also many small boats and rafts trying to catch those swimmers (for good, or for bad?). It will disappoint him to observe how some of the passengers, for non understandable reasons, jump into the water and swim to small rowing boats and rafts. At the same time, he will continuously feel in the air strong winds pushing forward new technologies. The instruments will show him the high atmospheric pressure of globalization (for good, or for bad?). Looking forward he is aware of dangers threatening his ship by under cliffs and reefs of publicizing data dealing with safety and efficacy of his services. Besides, the members of his crew repeatedly warn him that water is penetrating different parts of the ship and that it is very difficult to follow exactly his orders and manoeuvres.

### Task

What can he do, and how would he like his ship to be transformed? First, one has to consider the actual situation. The situation because varies in different countries, local circumstances and is permanently changing. Prepare data for selected country, analyse and discuss the situation in small group and present it in panel.

### Point of consideration

However, in all conditions there will be time to respond along with general managerial rules and local style. In most cases a rather aggressive re-adaptation will be necessary (28,57,58). Here are recalled several adequate rules:

- Changes in technologies will induce changes in management (“new plants do not survive in old pots”). For instance, new imaging technologies need a better clinical feed-back, and the pattern of “industry-like” hospital, where specialists work in their narrow fields on a production-line becomes inappropriate for them.
- Human resource management becomes more important than economic and technical management dominating at present.
- Innovations and flexible organisation become more important than maintenance and survival strategies, so often applied in critical situations.
- Autonomy (responsibility and accountability) is needed, but more important are agreed rules of behaviour than encouragement of anarchy.

Management has to develop magic communication skills (what types of skills) being sensitive to requirements of patients (customers), to appreciate professional freedom of experts and to improve relations with competing and sometimes unscrupulous rivals in the market.

Bon voyage, in spite of rough sea! *Navigare necesse est.*

## REFERENCES

1. Allison Jr. F. Public hospitals – past, present, and future. *Perspectives in Biology and Medicine* 1993; 36(4): 596-610.
2. Dickinson E, Deighan M. Collaboration and communication – the millennium agenda for clinical improvement? *Inter Jour for Quality in Health Care* 1999; 11(4): 279-81.

3. Healy J, McKee M, Where next for Eurohospitals? Euro Observer (Newsletter) 1999; 1(3): 3-5.
4. WHO: World Health Report 2000. Health systems: Improving performance. Geneva, WHO, 2000.
5. Thompson AGH. New millennium, new values: citizen participation as the democratic ideal in health care. Inter Jour for Quality in Health Care 1999; 11(6): 461-4.
6. Hospitals. In: Health 21: The Health for All Policy Framework for the WHO Region. Copenhagen, WHO, 1999: 124-5.
7. Jolly D, Gerbaud I. The hospital of tomorrow. SHS Paper No 5. Geneva, WHO, 1992.
8. Jolly D. Bolnica u XXI stoljeću. Zagreb, Medicinski fakultet, 1990.
9. Risse GB. Health care in hospitals: the past 1000 years. Lancet 2000. 1999; 354: siv 25.
10. Bubanj R. Bolnica. Medicinska enciklopedija. Zagreb Leksikografski zavod, 1958.
11. Pelikan JM, Garcia-Barbero M, Lobnig H, Krajic K, ed. Pathways to a health promoting hospital. Gamburg; G. Conrad Health Promotion Publications, 1998.
12. Health for All Data Base. European Region. WHO/EURO, January 2000 and July 2008..
13. Hospital Committee of the European Community. Hospital services in E.C. Leuven, HCEC, 1993.
14. Hensher M, Edwards N, Stokes R. International trends in the provision and utilisation of hospital care. BMJ 1999; 319: 845-8.
15. Garcia-Barbieri M, ed. Evaluating hospital effectiveness and efficiency. Milan; Fondazione Smith Kline, 1997.
16. Todd E. L'invention de l'Europe. Paris, Seuil, 1990.
17. Stoeckle JD. The citadel cannot hold: technologies go outside the hospital, patients and doctors too. The Milbank Quart 1995; 73(1): 3-17.
18. Blumenthal D. Health care reform at the close of 20<sup>th</sup> century. NEJM 1999; 340 (24): 1916-9.
19. Koivusalo M, Ollila E. Making a healthy world. London; Zed Books, 1997.
20. Terris M. The neoliberal triad of anti-health reforms: governmental budget cutting, deregulation, privatization. Jour of Public Health Policy. 1999; 20(3): 149-67.
21. Gray JAM. Postmodern medicine. The Lancet 1999; 354(9189): 1550-3.
22. Jarlier A, Chavret-Protat S. Can improving quality decrease hospital costs? International Journal for Quality in Health Care 2000; 2: 125-31.
23. Liberati A, Apolone G, Lang T, Lorenzo S. European project assessing the appropriateness of hospital utilization: background, objectives and preliminary results. Int J Qual Health Care 1995; 7(3): 187-99.
24. Shaw Ch D. External quality mechanisms for health care: summary of the ExPeRT project on *visitatie*, accreditation, EFQM and ISO assessment in European Union countries. Intern Jour Quality in Health Care 2000; 12(3): 169-75.
25. Gwatkin DR. Health inequalities and the health of poor. Bulletin of the WHO 2000; 78 (1): 3-18.
26. Acheson D. Health inequalities impact assessment. Round table discussion. Bulletin of the WHO 2000; 78 (1): 75-6.
27. Dahlgren G. Efficient equity-oriented strategies for health. Round table discussion. Bulletin of the WHO 2000; 78 (1): 79-81.

28. De Lourdes Pintasilgo M. The role of ethics in management. *Hospital* 1999; No 4: 8-12.
29. Banta HD. An approach to social control of hospital technologies. SHS Paper No 10. Geneva, WHO, 1995.
30. Garcia-Barbero M, Andersen K. Hospitals for Health – Integrated Care. Programme Objectives and Strategies. Copenhagen, WHO/EURO, 1998.
31. Hatcher M. Impact of information Systems on acute care hospitals: Result from a survey in the United States. *Jour of Medical Systems* 1998; 22(6): 379-87.
32. Argyris C, Schon D A. *Organizational Learning II*. Reading; Addison-Wesley Publishing Company, 1996.
33. Eysenbach G. Consumer health informatics. *BMJ* 2000; 320: 1713-6.
34. Vetter N. *The hospital: from centre of excellence to community support*. London, Chapman and Hall, 1995.
35. EURACT (European Academy of Teachers in General Practice. EURACT Statement on hospital posts used for general practice training. Tartu, EURACT, 1999.
36. van Lerberghe W, Lafort Y. The role of hospital in the district. Delivering or supporting primary health care? SHS paper No 2. Geneva, WHO, 1990.
37. Iglehart JK. Community Hospitals. *NEJM* 1993; 327: 372-6.
38. Jensen BC, Christensen SB, Pedersen B. Modernisation in Denmark: development of comprehensive hospital care units. *Eurohealth* 2000; 6(3): 36-8.
39. Corry M, Bonner G, McEntee S, Dugan J, MacAuley D. Hospitals do not inform GPs about medication that should be monitored. *Family Practice* 2000; 17(3): 268-71.
40. Coast J, Inglis A, Frankel S. Alternatives to hospital care: what are they and who should decide? *BMJ* 1996; 312: 162-6.
41. Hensher M, Fulop N, Coast J, Jefferys E. Better out than in? Alternatives to acute hospital care. *BMJ* 1999; 319: 1127-30.
42. Dowie R, Langman M. Staffing of hospitals: future needs, future provision. *BMJ* 1999; 319: 1193-5.
43. Edwards N, Harrison A. Planning hospitals with limited evidence: a research and policy problem. *BMJ* 1999; 319: 1361-3.
44. Shepperd S, Iliffe S. Effectiveness of hospital at home compared to in-patient hospital care. *The Cochrane Library*, Internet, 1997.
45. Victor CR, Khakoo AA. Is hospital the right place? A survey of “inappropriate” admissions to an inner London NHS trust. *J Public Health Med*. 2004; 16: 286-90.
46. Wilson A, Parker H, Wynn A, Jones J, Spiers N, Jagger C et al. Hospital at home is as safe as hospital, cheaper, and patients like it more: early results from a randomised controlled trial. *Society for Social Medicine abstracts. J Epidemiol Community Health* 1997; 51: 593.
47. Richards S, Coast J, Gunnell D, Peters D, Pounsford J, Darlow M. Randomised control trial comparing effectiveness and acceptability of an early discharge, hospital at home scheme with acute hospital care. *BMJ* 1998; 316: 1786-91.
48. Shepperd S, Harwood D, Jenkinson C, Gray A, Vessey M, Morgan P. Randomised control trial comparing hospital at home care with inpatient hospital care. I: three months follow up of health outcomes. *BMJ* 1998; 316: 1786-91.
49. Shepperd S, Harwood D, Gray A, Vessey M, Morgan P. Randomised control trial comparing hospital at home care with inpatient hospital care II: cost minimisation analysis. *BMJ* 1998; 316: 1791-6.

50. Coast J, Richards S, Peters D, Gunnell D, Darlow M, Pounsford J. Hospital at home or acute hospital care? A cost minimisation analysis. *BMJ* 1998; 316: 1782-6.
51. Wistow G. Home care and the reshaping of acute hospitals in England. An overview of problems and possibilities. *Jour of Management in Medicine* 2000; 14(1): 7-24.
52. Bobinac-Georgievski A. Rehabilitation in the community. *Intern Jour Rehabilitation Research* 2000; 23: 1-6.
53. Doeleman F. Interface study on the support of hospital to primary health care services in a district. Report on a Study. WHO/EUR/ICPPHC 610. Copenhagen, EURO, 1989.
54. Posnett J. Is bigger better? Concentration in the provision of secondary care. *BMJ* 1999; 319: 1063-5.
55. Vulić S, Healy J. Health Care Systems in Transition: Croatia. Copenhagen, WHO: European Observatory on Health Care Systems, 1999.
56. Strnad M, Jerković I. Medicinski centri. U: Popović B, Letica S, Škrbić M. Zdravlje i zdravstvena zaštita. Knjiga I. Zagreb, Jugoslavenska medicinska naklada, 1981. Str. 400.
57. Longest Jr. BB. The contemporary hospital chief executive officer. U: Spirn S, Benfer DW, ed. *Issues in Health Care Management*. Rockville, Aspen Publ., 1982: 45-55.
58. Mintzberg H. Towards healthier hospitals. *Health Care Management Review* 1997; 22(4): 9-18.

#### **RECOMMENDED READINGS**

1. Mc Kee M, Healy J (eds). *Hospitals in a changing Europe*, Open University Press, 2002
2. Mintzberg H. Towards healthier hospitals. *Health Care Management Review* 1997; 22(4): 9-18.
3. *Hospitals*. In: *Health 21: The Health for All Policy Framework for the WHO Region*. Copenhagen, WHO, 1999: 124-5.